

Interactive comment on “Reproducing pyroclastic density currents deposits of the AD 79 eruption of the Somma-Vesuvius volcano using the box-model approach” by Alessandro Tadini et al.

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This is a very nice and thorough manuscript. I have indicated some edits on the attached pdf, which will improve the presentation, but these are minor. Congratulations to the authors on this excellent work.

Make sure to be clear at the end about your conclusion, something like: "The box model is a valuable tool for PDC modeling in situations where topography is relatively simple and smooth (such as the area south of Somma Vesuvius). On the other hand, caution must be used for cases of complex topography, where the effects of density stratification within the currents, which is not modeled with the box-model approach,

plays a strong role in current behavior and deposition." This is basically the "punch line" of the paper and should be very clear both in the conclusions and in the abstract.

Please also note the supplement to this comment:

<https://se.copernicus.org/preprints/se-2020-138/se-2020-138-RC1-supplement.pdf>

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2020-138>, 2020.

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